Assignment -4

Assignment Date	19 October 2022
Student Name	DIVYA K
Team ID	PNT2022TMID05906
Project Name	Project-Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

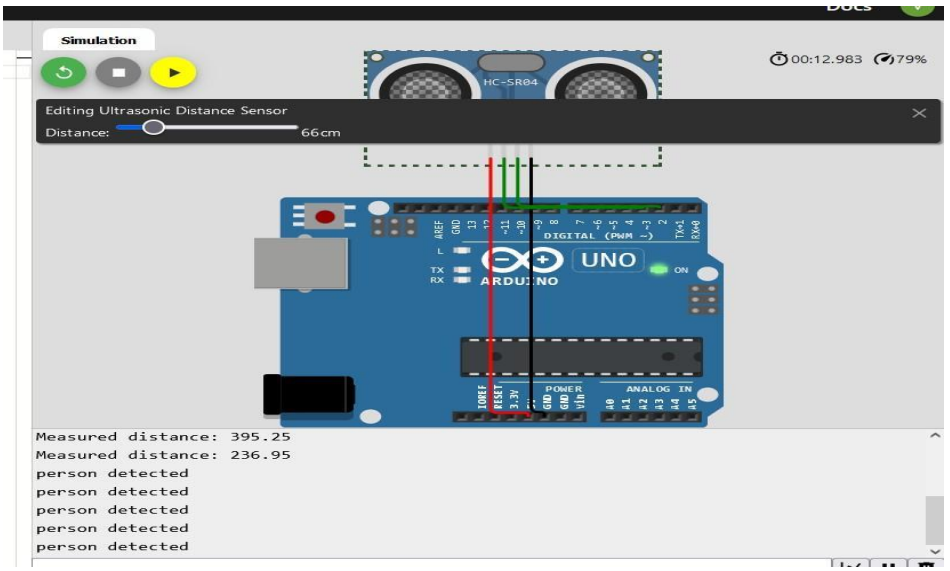
Question-1:

Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cms send "alert" to ibm cloud and display in device recent events.

Solution:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization = "fkxdqs"

#define deviceType = "Arduino"

#define deviceId = "1200"

#define authMethod = "use-token-auth"

#define authToken = "00000000"

void setup() {
 Serial.begin(9600);
 pinMode(TRIG_PIN, OUTPUT);
 pinMode(ECHO_PIN, INPUT);
}


float readDistanceCM() {
 digitalWrite(TRIG_PIN, LOW);
 delayMicroseconds(2);
 digitalWrite(TRIG_PIN, HIGH);
 delayMicroseconds(10);
 digitalWrite(TRIG_PIN, LOW);
 int duration = pulseIn(ECHO_PIN, HIGH);
 return duration * 0.034 / 2;
```

```
}


void loop() {
 float distance = readDistanceCM();
 if(distance <= 100)
 {
   Serial.println("person detected ");
 }
 else{
 Serial.print("Measured distance: ");
  Serial.println(readDistanceCM());
 }
  delay(1000);
}
```



Wokwi Link: https://wokwi.com/projects/346567349532361298

IBM Cloud

Device Recent Events